

#181

20066-05

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Shlomo BEN-HAIM, et al.

Serial No.: 09/101,723

Examiner: C.H. Layno

Filed: August 13, 1998

Group Art Unit: 3737

For: CONTROLLING HEART PERFORMANCE USING A
NON-EXCITATORY ELECTRICAL FIELD

May 22, 2001

Asst. Commissioner for Patents
Washington, D.C. 20231

RECEIVED
MAY 23 2001
TECHNOLOGY CENTER 3700

AMENDMENT

In response to the Office Action dated January 25, 2001, please amend the above-referenced application as follows:

IN THE CLAIMS:

D1 1. (Twice Amended) A method of modifying the activity of the heart or of a portion thereof, comprising applying to said heart or a portion thereof a non-excitatory electric field of a magnitude, shape, duty cycle, phase, frequency and duration suitable to obtain a desired change, to modify an activity of the heart or a portion thereof, wherein said field is applied at a time at which it is unable to generate a propagating action potential.

D2 3. (Twice Amended) A method according to claim 1, wherein the step of applying a non-excitatory electric field comprises applying an alternating current electric field.

D3 24 18. (Twice Amended) A method of reducing an output of a chamber of a heart, comprising applying to a portion of said heart chamber a non-excitatory electric field of a magnitude, shape, duty cycle, phase, frequency and duration suitable to obtain a desired change, to modify an activity of the heart or a portion thereof, wherein said field is applied at a time at which it is unable to generate a propagating action potential, and wherein reducing the output of the chamber is obtained by reducing the reactivity of said portion, or its sensitivity, to an activation signal, or by reversibly blocking its conduction pathway.